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Fire extinguishing agent for use as dry powder or additive in water - contains hydrogen-forming polymer powder and a substance with a large surface structure and/or a capillary and/or fibrous structure

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EP 649669	AL	19950426	199521 B
DE 4336319	AL	19950427	199522
AU 9477446	A	19950511	199527
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JP 7255870	A	19951009	199549

Local Applications (No Type Date): EP 94116531 A 19941020; DE 4336319 A 19931025; AU 9477446 A 19941025; [REDACTED] A 19941024; JP 94260764 A 19941025

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Abstract (Basic): EP 649669 A

A fire extinguishing agent (I) for use as a dry powder or as an additive in water, contains mainly (a) hydrogen-forming polymer powders and (b) substances with a large surface structure and/or a capillary and/or fibrous structure, mixed to give a free-flowing material.

Prodn. of (I) comprises mixing (b) with the mechanically pulverised, dry, free-flowing super-absorber (a), after or during mixing with any other components, or mixing (b) with crushed, water-contg. raw (a) (obtd. by gel polymerisation and not yet dried), then drying, grinding and opt. adding other components, or mixing (b) with the monomer soln. for (a), polymerising the mixt. by gel polymerisation, drying, milling and opt. adding other components.

Pref., (b) is added to the monomer soln. as above.

(I) contains 10-80 wt.% (a) and up to 80 wt.% (b), and pref. also a fireproofing agent or fire retardant in amts. up to 10 wt.%.

(a) are crosslinked, hydrogen-forming polymers obtd. by polymerisation of acrylamide and/or acrylic acid and/or a salt thereof in the presence of up to 2 wt.% bis-acrylamido-acetic acid, trimethylolpropane triacrylate and/or tetra-allyloxyethane.

(b) consists of kieselguhr, wood flour, paper fibres, fibrous or milled cellulose, fibrous or milled plastic, milled plastic foam and/or amorphous hydrophobic silica.

(I) may also contain up to 30 (pref. up to 10) wt.% polyglycol, up to 30 (pref. up to 10) wt.% organic adhesive, up to 10 (pref. up to 5) wt.% biodegradable organic wetting agent, up to 5 (pref. up to 1) wt.% biodegradable colouring agent, up to 10 (pref. up to 5) wt.% flow accelerator and up to 10 (pref. up to 0.3) wt.% stabiliser.

USE - Used as a dry powder extinguisher for direct application to the seat of a fire and as a swollen, wet extinguisher obtd. by mixing with water to a gel-like consistency, for use in commercial fire

extinguishers and fixed units, or as a dry or gelled additive in fire extinguisher tanks for use by fire service techniques (claimed).

ADVANTAGE - Provides a fire extinguishing agent which can be used as a dry powder or as an additive in water, without the disadvantages of prior art systems (e.g. lack of cooling effect in foaming agents, delayed swelling and agglomeration of the super-absorber (a), etc.).

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